Polymer Degradation and Stability **26** (1989) 385–387

CONTENTS OF VOLUME 26

Number 1

An Infrared Spectroscopic Study of Polyethylene Terephthalate Degradation in Polyester Fiber/Nitrile Rubber Composites 1
K. R. CARDUNER, M. C. PAPUTA PECK, R. O. CARTER III & P. C. KILLGOAR JR (USA)

Kinetics of the Stabilizing Effect of Calcium and Zinc Stearates in the Thermal Degradation of PVC: Part II 11
GY. LÉVAI, GY. OCSKAY & ZS. NYITRAI (Hungary)

Stability and Degradation of *Trans*-Polyphenylacetylene in Organic Solvents and under Light Illumination 21
K. G. NEOH, E. T. KANG & K. L. TAN (Singapore)

Thermoplastic Elastomers: Part III—Ageing and Mechanical Properties of Natural Rubber–Reclaimed Rubber/Polypropylene Systems and their Role as Solid Phase Dispersants in Polypropylene/Polyethylene Blends 31
S. AL-MALAIKA & E. J. AMIR (UK)

Complex Formation in Photostabilized Polypropylene 43
J. BARTUŠ, J. BENISKA, V. MACHO & M. POVAŽANCOVÁ (Czechoslovakia)

Thermal Degradation of Isocyanate Modified Poly(2,6-dimethyl-1,4-phenylene oxide) 51
S. S. MAHAJAN, B. D. SARWADE & V. G. GUNJIKAR (India)

Photochemistry in Well Mixed and in Stationary Layers: Case I. 57
JIRI MALAC (Czechoslovakia)

The Photo-sensitized Decomposition of Peroxides in Polyethylene 65
P. V. ZAMOTAEV (USSR)

Reactivity of Hindered Piperidine Compounds during Photo-oxidation of Toluene 79
KAZUTOSHI OHASHI, KIYOSHI NAKAI & TOSHIO KAWAGUCHI (Japan)

The Reaction Mechanism of the Alkylation of 2,6-Di-Tert-Butyl Phenol by Methyl Acrylate in the Presence of the 2,6-Di-Tert-Butyl Phenolate of Potassium and Alkali 89
A. A. VOLOD'KIN, A. S. ZAITSEV, V. L. RUBYAILO, V. A. BELYAKOV & G. E. ZAIKOV (USSR)

Polymer Degradation and Stability **(26)** (1989)—© 1989 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Number 2

Thermal Degradation of Cellulose Esters and their Tosylated Products in Air . 101
RAJESH K. JAIN, KRISHAN LAL & HARI L. BHATNAGAR (India)

Effect of Diffusion of Low-Molecular Components on the Change in the Flammability of Polyethylene Cable Materials 113
L. P. RAZUMOVSKII, R. M. ASEEVA, Z. K. KULIKOVA, L. L. KHOKHLOVA & G. E. ZAIKOV (USSR)

Metal Salts of 2-[(1-Hydroxy-4-methyl-2-benzoyl)carbonyl] and 2-[(1-Hydroxy-4,5-dimethyl-2-benzoyl)carbonyl]Benzoic Acids as Photo-stabilizers for *cis*-1,4-Polybutadiene 125
N. A. WEIR (Canada), J. ARCT & Z. GOLUBSKI (Poland)

γ-Radiation-Induced Degradation of Poly(dimethylsilylene-*co*-methylphenylsilylene) in Cyclohexane and THF-Ethyl Alcohol Solution 135
KUNIO OKA & REN NAKAO (Japan)

Thermal Ageing Dependence of Electrical Conductivity for Butyl Rubber (IIR) Loaded with HAF Carbon Black. 145
A. I. EATAH, A. A. GHANI & A. A. HASHEM (Egypt)

Evaluation of Some Commercial Copper Deactivators by Chemiluminescence . 151
ZENJIRO OSAWA & KENJI TSURUMI (Japan)

Behavior of Primary Radicals during Thermal Degradation of Poly(Methyl Methacrylate) 161
TAKASHI KASHIWAGI, ATSUSHI INABA & ANTHONY HAMINS (USA)

Photo-stabilizing Efficiency of N-Substituted Hindered Amines in Polypropylene: Effects of Processing Conditions and Exposure to a Protonic Acid 185
S. CHMELA, D. J. CARLSSON & D. M. WILES (Canada)

Book Reviews 197

Number 3

Autoinhibition in Polystyrene Photo-oxidation 203
PAUL C. LUCAS & ROGER S. PORTER (USA)

Catalytic Degradation of Polymers: Part II—Degradation of Polyethylene. . 209
PIER LUIGI BELTRAME, PAOLO CARNITI, GUIDO AUDISIO & FABIO BERTINI (Italy)

The Long-term Stability of Cellulose Ester Coatings 221
MICHELE EDGE, NORMAN S. ALLEN, TERENCE S. JEWITT & C. VELSON HORIE (UK)

Effect of Radiochemical Degradation in the Glassy State on the Glass Transition Temperature of Poly(α-Methylstyrene) 231
F. THOMINETTE & J. VERDU (France)

Nitroxide Decay Assay Measurements of Free Radical Photo-initiation Rates in Polyester Urethane Coatings 241
J. L. GERLOCK, D. F. MIELEWSKI & D. R. BAUER (USA)

Accelerated Photo-degradation in the Solid Phase of Styrene Copolymers Bearing *O*-Acyloxyimino Groups 261
KYOUNG-HUN SONG, MASAHIRO TSUNOOKA & MAKOTO TANAKA (Japan)

Photo-oxidation of Elastomeric Materials: Part II—Photo-oxidation of Styrene–Butadiene Copolymer 273
CLAUDIE ADAM, JACQUES LACOSTE & JACQUES LEMAIRE (France)

Thermal Decomposition Processes in Polycarbonates 289
GIORGIO MONTAUDO, CONCETTO PUGLISI & FILIPPO SAMPERI (Italy)

Number 4

Flame and Thermal Resistance of Phosphorus-Functionalized Poly(Methyl Methacrylate) and Polystyrene 303
C. P. REGHUNADHAN NAIR, G. CLOUET & Y. GUILBERT (France)

Outdoor Weathering of Selected Polymeric Materials under Marine Exposure Conditions 331
JAN E. PEGRAM & ANTHONY L. ANDRADY (USA)

Polymerization Products of *p*-Benzoquinone as Bound Antioxidants for Blends of Natural Rubber 345
MAGDY W. SABAA, TAREK M. MADKOUR & AHMADY A. YASSIN (Egypt)

Physical Aspects of the Hydrolysis of Polyethylene Terephthalate 359
A. BALLARA & J. VERDU (France)

Mechanisms of Antioxidant Action: The Photo-antioxidant Behaviour of Nitroalkanes 373
S. AL-MALAIKA, T. CZECKAJ, G. SCOTT & L. M. K. TILLEKERATNE (UK)